

GILA RIVER BASIN

09502960 GRANITE CREEK AT PRESCOTT, AZ

LOCATION--Lat 34°33'07", long 112°27'42", in NE1/4SW1/4NW1/4, sec. 34, T.14 N., R.2 W., Yavapai County, Hydrologic Unit 15060202, at southwestern boundary of Yavapai-Prescott Indian Reservation, within the city of Prescott, AZ.

DRAINAGE AREA--30.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--Nov. 1994 to current year.

REVISED RECORDS--WDR AZ-98-1: 1997.

GAGE--Water-stage recorder. Elevation of gage is 5,285 ft above sea level, from topographic map.

REMARKS--Records fair except for estimated daily discharges, which are poor. Flow is partly regulated by Goldwater Reservoirs on Bannon Creek.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 3,200 ft³/s Mar. 6, 1995, gage height, 8.58 ft from slope-conveyance survey; maximum gage height, 8.91 ft, Aug. 26, 2000 (backwater from tributary). No flow for many days each year.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 400 ft³/s (revised) and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 30	1900	1,020	8.46
Aug. 26.....	1415	*2,270	*9.08
Aug. 28.....	1900	1,560	8.78

Minimum daily discharge, no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.01	0.04	0.65	0.18	0.18	27	5.4	0.79	0.10	0.00	4.5	e0.72
2	e0.01	0.05	0.16	0.18	0.18	29	5.3	0.73	0.08	0.00	0.89	e0.09
3	e0.01	0.05	e0.14	0.18	0.18	26	4.7	0.67	0.07	0.00	0.13	e1.6
4	e0.01	0.06	e0.14	0.18	0.18	27	4.3	0.67	0.08	0.00	0.06	18
5	e0.02	0.07	e0.14	0.18	0.18	28	3.9	0.67	0.07	0.00	0.06	8.4
6	e0.01	0.09	e0.10	0.51	0.18	29	3.6	0.67	0.07	0.00	0.05	9.1
7	e0.01	0.09	e0.10	0.23	0.18	35	3.2	0.73	0.07	0.00	0.05	3.2
8	e0.01	1.9	e0.10	6.1	0.18	40	2.8	0.72	0.06	0.00	0.05	0.80
9	e0.01	17	e0.08	1.3	0.18	43	2.9	0.70	0.04	0.00	0.05	20
10	0.01	5.7	e0.08	0.48	0.18	43	2.6	0.70	0.04	0.00	0.05	7.7
11	0.01	0.09	e0.08	0.34	0.19	39	2.3	0.63	0.04	0.00	0.04	2.7
12	0.01	0.05	e0.08	0.28	12	32	2.1	0.58	0.03	0.00	0.03	0.44
13	0.01	0.05	e0.06	0.23	124	27	2.0	0.52	0.03	0.00	0.02	0.06
14	0.01	0.05	e0.06	0.23	48	22	1.8	0.46	0.02	0.00	3.3	0.03
15	0.01	0.05	e0.06	0.23	21	21	8.4	0.41	0.01	0.00	6.1	0.01
16	0.01	0.05	e0.06	0.23	12	169	1.9	0.32	0.00	0.00	0.06	0.01
17	0.01	0.05	2.3	0.23	7.6	227	1.8	0.26	0.00	0.00	0.04	0.01
18	0.01	0.06	0.47	0.23	5.3	87	1.7	0.21	0.00	0.00	0.05	0.01
19	0.01	0.06	0.19	0.23	3.7	60	1.5	0.20	0.00	0.00	0.10	0.01
20	0.01	0.06	0.27	2.5	2.8	46	1.4	0.19	0.00	0.00	0.14	0.00
21	0.01	0.06	0.26	0.73	1.6	38	1.3	0.17	0.00	0.00	3.6	0.00
22	0.01	0.07	0.27	0.31	1.0	29	1.2	0.16	0.00	0.00	14	0.00
23	0.02	0.13	0.71	0.26	0.65	24	1.2	0.17	0.00	0.72	30	0.00
24	0.02	0.30	0.50	0.22	0.39	19	1.2	0.17	0.00	0.03	9.6	0.00
25	0.02	0.54	0.30	0.18	13	15	1.1	0.17	0.00	11	3.7	0.00
26	1.8	0.43	e0.24	0.18	42	12	1.0	0.16	0.00	0.07	144	0.00
27	1.9	0.56	e0.20	0.18	42	9.9	1.0	0.16	0.00	0.31	6.4	0.00
28	0.03	0.55	e0.18	0.18	32	8.0	1.0	0.67	0.00	0.04	121	0.00
29	0.04	3.8	e0.18	0.18	---	6.8	0.95	0.21	0.00	4.8	23	0.00
30	0.04	4.9	e0.18	0.18	---	6.0	0.88	0.09	0.00	121	4.1	0.01
31	0.05	---	0.18	0.21	---	5.5	---	0.11	---	8.4	e0.22	---
TOTAL	4.15	36.96	8.52	17.06	371.03	1230.2	74.43	13.07	0.81	146.37	375.39	72.90
MEAN	0.13	1.23	0.27	0.55	13.3	39.7	2.48	0.42	0.027	4.72	12.1	2.43
MAX	1.9	17	2.3	6.1	124	227	8.4	0.79	0.10	121	144	20
MIN	0.01	0.04	0.06	0.18	0.18	5.5	0.88	0.09	0.00	0.00	0.02	0.00
MED	0.01	0.07	0.18	0.23	1.3	28	1.9	0.41	0.01	0.00	0.14	0.01
AC-FT	8.2	73	17	34	736	2440	148	26	1.6	290	745	145
CFSM	0.00	0.04	0.01	0.02	0.44	1.32	0.08	0.01	0.00	0.16	0.40	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003			
MEAN	1.96	0.89	0.68	5.58	15.0	20.2	5.25	0.77	0.24	4.88	6.00	5.41
MAX	13.1	3.14	2.39	27.5	85.5	74.1	31.6	3.92	1.15	24.4	18.4	14.0
(WY)	2001	2001	1998	1995	1995	1995	1998	1999	1999	1999	2000	1997
MIN	0.085	0.14	0.20	0.089	0.093	0.20	0.24	0.027	0.000	0.000	0.25	0.25
(WY)	1997	1996	2000	2002	2002	2002	2002	1996	2002	1997	2002	2001

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1995 - 2003
ANNUAL TOTAL	301.69	2350.89	
ANNUAL MEAN	0.83	6.44	4.17
HIGHEST ANNUAL MEAN			10.1
LOWEST ANNUAL MEAN			0.79
HIGHEST DAILY MEAN	53 Sep 7	227 Mar 17	940 Mar 6 1995
LOWEST DAILY MEAN	0.00 May 28	0.00 Jun 16	0.00 Jul 11 1995
ANNUAL SEVEN-DAY MINIMUM	0.00 May 28	0.00 Jun 16	0.00 Jul 22 1995
ANNUAL RUNOFF (AC-FT)	598	4660	3020
ANNUAL RUNOFF (CFSM)	0.028	0.21	0.14
10 PERCENT EXCEEDS	0.25	18	8.4
50 PERCENT EXCEEDS	0.06	0.18	0.19
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

GILA RIVER BASIN
09502960 GRANITE CREEK AT PRESCOTT, AZ—CONTINUED
WATER-QUALITY RECORDS

PERIOD OF RECORD--Sept. 1994 to Sept. 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, us/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	
FEB	13...	0720	109	625	9.1	92	7.3	158	6.8	7.2	51	11	14.7	3.51
Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	
FEB	13...	2.07	.6	9.23	40	49	.0	13.9	.11	4.35	10.3	84	.11	1.1
Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	
FEB	13...	.12	1.24	.28	.29	.012	.98	.383	.12	.13	.40	1.4	E100k	E400k
Date	Fecal streptococci KF MF, col/100 mL (31673)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	
FEB	13...	6000	E2	23.3	<.5	20	<8	<10	<8	E4	23	.14	E4	17.9
Date	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Oil and grease, water, unfltrd extract mg/L (00556)	Aldrin, water, unfltrd, ug/L (39330)	alpha-sulfan, water, unfltrd, ug/L (34361)	alpha-HCH, water, unfltrd, ug/L (39337)	alpha-HCH-d6, surrog, water, unfltrd pct rcv (99778)	
FEB	13...	<.02	<30	<30	<3	<9	84.9	<8	<24	E4n	<.04	<.1	<.03	81.8
Date	Aroclor 1016 + 1242, water, unfltrd, ug/L (81648)	Aroclor 1221, water, unfltrd, ug/L (39488)	Aroclor 1232, water, unfltrd, ug/L (39492)	Aroclor 1248, water, unfltrd, ug/L (39500)	Aroclor 1254, water, unfltrd, ug/L (39504)	Aroclor 1260, water, unfltrd, ug/L (39508)	beta-Endo-sulfan, water, unfltrd, ug/L (34356)	beta-HCH, water, unfltrd, ug/L (39338)	Chlor-dane, technical, water, unfltrd, ug/L (39350)	cis-Chlor-dane, water, unfltrd, ug/L (39062)	delta-HCH, water, unfltrd, ug/L (34259)	Diel-drin, water, unfltrd, ug/L (39380)	Endo-sulfan, water, unfltrd, ug/L (34351)	
FEB	13...	<.1	<1	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	
Date	Endrin aldehyde, water, unfltrd, ug/L (34366)	Endrin, water, unfltrd, ug/L (39390)	Heptachlor epoxide, water, unfltrd, ug/L (39420)	Heptachlor, water, unfltrd, ug/L (39410)	Isodrin surrog, water, unfltrd, ug/L (90570)	Lindane, water, unfltrd, ug/L (39340)	p,p'-DDD, water, unfltrd, ug/L (39310)	p,p'-DDE, water, unfltrd, ug/L (39320)	p,p'-DDT, water, unfltrd, ug/L (39300)	PCB 207, surrog, water, unfltrd, pct rcv (99781)	Petroleum hydrocarbons, water, unfltrd, mg/L (45501)	Toxaphene, water, unfltrd, ug/L (39400)	trans-Chlor-dane, water, unfltrd, ug/L (39065)	
FEB	13...	<.2	<.06	<.8	<.03	66.1	<.03	<.1	<.04	<.1	68.8	<2	<2	<.1

09502960 GRANITE CREEK AT PRESCOTT, AZ—CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water, unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water, unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene, water, unfltrd ug/L (77168)	1,2,3-Tri-chloro-benzene, water, unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane, water, unfltrd ug/L (77443)	1,2,4-Tri-chloro-benzene, water, unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene, water, unfltrd ug/L (77222)	Dibromo-chloro-propane, water, unfltrd ug/L (82625)
FEB 13...	<.03	<.03	<.09	<.06	<.06	<.04	<.04	<.05	<.3	<.16	<.1	<.06	<.5
Date	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene, water, unfltrd ug/L (34536)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unf pct rcv ug/L (99832)	1,2-Di-chloro-propane, water, unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene, water, unfltrd ug/L (77226)	1,3-Di-chloro-benzene, water, unfltrd ug/L (34566)	1,3-Di-chloro-propane, water, unfltrd ug/L (77173)	1,4-Di-chloro-benzene, water, unfltrd ug/L (34571)	14Bromo-fluoro-benzene surrog. VOC Sch wat unf pct rcv ug/L (99834)	2,2-Di-chloro-propane, water, unfltrd ug/L (77170)	2-Chloro-toluene, water, unfltrd ug/L (77275)	4-Chloro-toluene, water, unfltrd ug/L (77277)	4-Iso-propyl-toluene, water, unfltrd ug/L (77356)
FEB 13...	<.04	<.03	99.5	<.03	<.04	<.03	<.1	<.05	94.5	<.05	<.04	<.05	.17
Date	Acrylonitrile water, unfltrd ug/L (34215)	Benzene, water, unfltrd ug/L (34030)	Bromo-benzene, water, unfltrd ug/L (81555)	Bromo-chloro-methane, water, unfltrd ug/L (77297)	Bromo-di-chloro-methane, water, unfltrd ug/L (32101)	Bromo-methane, water, unfltrd ug/L (34413)	Chloro-benzene, water, unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane, water, unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene, water, unfltrd ug/L (34704)	Di-bromo-chloro-methane, water, unfltrd ug/L (32105)	Di-bromo-methane, water, unfltrd ug/L (30217)
FEB 13...	<1	E.02	<.04	<.12	<.05	<.3	<.03	<.1	<.2	<.04	<.09	<.2	<.05
Date	Di-chloro-di-fluoro-methane, wat unf ug/L (34668)	Di-chloro-methane, water, unfltrd ug/L (34423)	Ethyl-benzene, water, unfltrd ug/L (34371)	Hexa-chloro-butadiene, water, unfltrd ug/L (39702)	Iso-propyl-benzene, water, unfltrd ug/L (77223)	Naphth-alene, water, unfltrd ug/L (34696)	n-Butyl-benzene, water, unfltrd ug/L (77342)	n-propyl-benzene, water, unfltrd ug/L (77224)	sec-Butyl-benzene, water, unfltrd ug/L (77350)	Styrene, water, unfltrd ug/L (77128)	Methyl-t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene, water, unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)
FEB 13...	<.18	<.2	E.01	<.1	<.06	<.5	<.2	<.04	<.06	<.04	E.1	<.10	E.01
Date	Tetra-chloro-methane, water, unfltrd ug/L (32102)	Toluene, water, unfltrd ug/L (34010)	Toluene-d8, surrog, Sch2090 wat unf percent recovry ug/L (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene, water, unfltrd ug/L (34699)	Tri-bromo-methane, water, unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane, water, unfltrd ug/L (34488)	Tri-chloro-methane, water, unfltrd ug/L (32106)	Vinyl-chloride, water, unfltrd ug/L (39175)	1,2,3,4-Tetra-methyl-benzene, water, unfltrd ug/L (49999)	1,2,3,5-Tetra-methyl-benzene, water, unfltrd ug/L (50000)	1,2,3-Tri-methyl-benzene, water, unfltrd ug/L (77221)
FEB 13...	<.06	.14	104	<.03	<.09	<.10	<.04	<.09	<.02	<.1	<.2	<.2	<.1
Date	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	2-Ethyl-toluene, water, unfltrd ug/L (77220)	3-Chloro-propene, water, unfltrd ug/L (78109)	Acetone, water, unfltrd ug/L (81552)	Bromo-ethene, water, unfltrd ug/L (50002)	Carbon di-sulfide, water, unfltrd ug/L (77041)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane, water, unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)
FEB 13...	<.1	<.06	<.12	E4	<.1	<.07	<.2	<.10	<.2	<5.0	<.2	<.35	E.2
Date	Methyl acrylate, water, unfltrd ug/L (49991)	Methyl methacrylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta+ para-Xylene, water, unfltrd ug/L (85795)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	o-Xylene, water, unfltrd ug/L (77135)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)				
FEB 13...	<2.0	<.3	<.08	E.04	<.7	<.07	<.05	<2	<.7				

Remark codes used in this report:

< -- Less than

E -- Estimated value

Value qualifier codes used in this report:

k -- Counts outside acceptable range

n -- Below the NDV